

Canada's shameful position on biodiversity puts us all in danger

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Body

Twenty years ago this month, Canada and another 192 countries signed a legally binding international agreement - the Convention on Biological Diversity - to protect biodiversity. This week, delegates from around the globe are meeting at the Rio+20 conference in Rio de Janeiro to evaluate progress made in conserving biodiversity in the interim.

But at a time when we are facing economic stagnation and the need to feed 7 billion people on the planet, why should we worry about biodiversity and reduce our use of the environment?

Because life on Earth, to the best of our knowledge, is unique in the universe. It is an awe-inspiring multitude of living creatures that inhabit, but also sustain, a biosphere upon which all humans depend.

Biological diversity - or its contraction, "biodiversity" - refers to the great variety of life in all its manifestations, from genes to ecosystems and bacteria to belugas. Expansion of the human enterprise is eroding biodiversity at a rate unprecedented in human history. Already, 627 species are at risk of extinction in Canada. The rate of extinction will peak in the next 50 years because of ongoing economic expansion, climate change, pollution and habitat destruction. By then we may well be experiencing the Earth's sixth mass extinction.

Our ecosystems are of enormous benefit to Canadian society, providing goods such as food, timber and water, and services such as flood control and fertile soils. Past research has estimated the value of such "ecosystem services" from Canadian boreal ecosystems at \$93 billion per year, roughly nine per cent of Canada's GDP.

If we view ecosystems as giant engines that transform simple inputs (such as sunlight and carbon dioxide) into useful outputs (such as oxygen, biomass and clean water), then species are the moving parts in this engine. How many of these parts can an ecosystem lose before it ceases to operate efficiently?

The last 20 years has seen an enormous scientific effort to answer this question. More than 600 experiments have examined how biodiversity loss impacts our ecosystems and showed overwhelming evidence that reducing local biodiversity results in unhealthy ecosystems.

If we do not slow the rate of biodiversity loss, our economy will begin to pay a massive ecological price for business as usual.

The widespread consequences for humankind stand in sharp contrast to the lack of current political leadership on the subject. This is particularly evident in Canada, where existing environmental legislation is already weaker than comparable laws in the U.S. and Western Europe.

Our situation has worsened at the hands of the Conservative government, with its proposed changes in the omnibus Bill C-38 currently before Senate. This bill will scale back and limit the environmental assessment process, strip most of Canada's 71 endangered aquatic species of habitat protection, allow more dumping of waste at sea, exempt pipeline projects from environmental standards and reduce independent oversight of nuclear power.

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Of course, legislation alone is not enough to protect species. We also need long-term monitoring of the changes to species and their habitat. Biodiversity research in Canada is among the best in the world, but it is being dismantled. Will Bill C-38, the government is planning to cancel some of the key programs that fund long-term and innovative biodiversity research. For example, funding has been pulled from the Experimental Lakes Area, a world-famous research facility in Ontario that provided the critical evidence that led to the ban of phosphates in detergents.

Losing our ability to monitor our ecosystems is like driving into the night without headlights - we lose the ability to see the dangers that lie in the road ahead.

In the two decades since Canada signed the Convention on Biological Diversity, we have witnessed the steady loss of biodiversity in our country, and a growing indifference by our government to keep our promise to meet international biodiversity targets.

Canada's current position is shameful. The science is clear, and the evidence is unequivocal.

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